QC

Quality Control

Memo

											DQA:	Date	-
NCR:	Ye	s / No				WORK ORDER NON-C	CON	IFORM	MANCE / UPI	DATE			• .
											QA Closed:	Date	:
Work Or	deř					DISPOSITION				AGAINST D	EPARTMENT	PROCESS	-
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Par	t No	;).				Scrap	1	3 —		Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is	1	Thermoforming Finishing			Rec/Stor	e/Packaging	Other
NCF	R No)				Work Order Update]		Large Fab	Composite		Supplier	
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Root						ption of work order update		nitial		ion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Chi	ief Eng	Descr	ription	Date	Verification	QC Inspector
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-		Cracks			<u> </u>	Broken/Damaged			on incomplete	_	Part Incorred)	Weld
	\vdash	Crushed/0	Crimped		<u> </u>	Burrs	-		ions Incomplete/U	Inclear	Part Lost/Mi	ssing	Wrong Stock Pulled
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1			Cut Too Short	-	Misread	1	L	Power Loss/	ourge	Other			
	Ripples in Bend Drill Holes Torque Waves in Extrusion Drawing			Drawing	\vdash	Offset	Calibration				·		
	\vdash	Turning S			" , -	Finish	Out of Calibration Out of Sequence						
	 	→ -			\vdash	Folio	-		Dimensions				
	- 11	Wave/Twist in Tube Folio			1.0.0		Cutsiat	JC.1310113					

March-19-13 1:51:04 PM

Packaging

D3067-1 Item 1D: Accept *N900040100* Setup Start **Revision ID:** Item Name: End Plate *60* **Start Qty: 60.00 Start Date:** 3/19/13 **Cust Item ID:** Required Date: 3/26/13 Req'd Qty: 60.00 *60* **Customer:** Reference: Run Process Plan: _____ Date: ____ **Approvals:** Tooling: _____ Date: ____ QC: _____ Date: ____ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Reject Accept Reject Insp. Work Center ID **Description Run Hours** Code Qty Qty Number Stamp 130 0.00 NC BRAKE *130* Brake NC 0.00 Memo Brake NC Bend as per Dwg D3067 140 QC5- Inspect part completeness to step on W/O 0.00 *140* QC 0.00 Memo Quality Control Identify as per dwg & Stock Location: WA. 003 150 *150* 0.00 Packaging Memo

*** STOCK IN STEP CELL***

	1										DQA:	Date	e:
NCR:	Yes	s / No				WORK ORDER NON-O	CON	iFOR i	MANCE / UPI	DATE	QA Closed:	Date	2:
Work Or	der:					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	·
İ		ì,				Rework]	Skid-tube Crosstube] _	Water Jet	Engineering
Par	t No.					Scrap	1		Machining	Small Fab	_	d. Eng. Coor.	Quality
NC	R No.					Use-as-is Work Order Update	-		noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
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Root	1	:			Descri	ption of work order update	Ir	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Chi	ef Eng	Descr	ription	Date	Verification	QC Inspector
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Material]									İ		
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	L	Centre No	ot Conce	ntric to	o/s	BOM/Route	_	Hardwa		_	Over/Under		Temperature/Cure
	<u> </u>	Cracks			<u> </u>	Broken/Damaged	_	•	on incomplete	<u></u>	Part Incorre	<u> </u>	Weld
	L	Crushed/	Crimped		<u> </u>	Burrs	-		ions Incomplete/L	Jnclear	Part Lost/M	issing	Wrong Stock Pulled
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	\perp	Inspection		Tube	<u> </u>	Cut Too Short	\vdash	Misread	i	L	Power Loss/	Surge	Other
	·L	Ripples in				Drill Holes	\vdash	Offset					
	<u> </u>	Torque W			n	Drawing	Out of Calibration					<u>.</u>	
1	<u>ا</u> ـــ	Turning S				Finish	-		Sequence				
1	Wave/Twist in Tube				1	Folio		Outside	Dimensions				

March-19-13 1:51:04 PM

Item ID:

D3067-1

Accept

N900040100

Setup Start

Revision ID:

Item Name:

Required Date: 3/26/13

End Plate 3/19/13

Start Qty: 60.00 Req'd Qty: 60.00 *60* *60*

Date:_____

Cust Item ID:

Customer:

Reference:

Start Date:

Approvals:

Process Plan:

Date:____

Tooling:

SPC (Y/N):

Set Up/

Date: Date: Run

Start

Stop

Sequence ID/ **Work Center ID**

Operation Description

Run Hours 0.00

Tool ID Tool #

Plan Accept Code Qty

Reject Qty

Reject Insp. Number Stamp

160

160

QC

Memo

QC21- Final Inspection - Work Order Release

0.00

Quality Control

											DQA:	Date	:
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFORI	MANCE / UP	DATE	QA Closed:	Date	:
Work Or	deř:					DISPOSITION				AGAINST D	EPARTMENT,		
	No.				····	Rework Scrap		Skid-tube Crosstube Machining Small Fab			Pro	Water Jet d. Eng. Coor.	Engineering Quality
NCR	No					Use-as-is Work Order Update		Thermoforming Finishing Large Fab Composite			Rec/Stor	re/Packaging Supplier	Other
Root					Descri	ption of work order update	ı	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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Material	_												
Setup	Ŀ												
Other							1						
Process	<u> </u>	ļ											
Supplier	<u> </u>												
Training	_	1			ļ								
Unapproved	<u> </u>	<u> </u>			<u> </u>			T CATE	CORY				
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	+	Cracks	or conce		°,	Broken/Damaged	Н		ion incomplete	<u> </u>	Part Incorred	 	Weld
	<u> </u>	Crushed/	Crimped		<u> </u>	Burrs	-	ł ·	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs				Contamination	\vdash	Mainte	·	-	Part Moved	, <u> </u>	
		Heat Treat				Countersink		Mislabe	eled		Positioned V	Vrong	
		Inspection Strip in Tube Cut Too Short			Cut Too Short		Misread	d		Power Loss/	Surge	Other	
		Ripples in Bend Drill Holes					Offset						
		Torque Waves in Extrusion Drawing				Drawing	Out of Calibration						
		Turning Sequence Finish				Finish		Out of S	Sequence				
	:	Wave/Twist in Tube Folio				Folio		Outside	Dimensions				

Picklist Print

March-19-13 1:51:08 PM

Work Order ID: 98655

Parent Item:

D3067-1

Parent Item Name: End Plate

98655

D3067-1

Start Date: 3/19/13

Required Date: 3/26/13

Start Qty: 60.00

Required Qty: 60.00

Comments:

IPP: 03.01.21 Remove step 6 (Deburr)
IPP Rev:B Now on Water jet 06-06-16 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M5052H32S.063		Purchased	No			100	sf	68.3053	0.0625	-3.94736 8	,		
*M5052H3	325 063	*							**	4.79	598	W/ 13	· 03·24

5052-H32 .063 Sheet

Location	Loc Qty	Loc Code	
MAT022	68.305264		
114322	25.705264		
120603	18.5		
121901	24.1		
			

Page 1

											DQA:	Date	e:
NCR:	Yes	s / No				WORK ORDER NON-	COI	NFORM	MANCE / UP	DATE	QA Closed:	Date	a-
	:											- 1	
Work Or	der:					DISPOSITION		AGAINST DEPARTMENT/PROCESS					
	i					Rework	7	Skid-tube Crosstube				Water Jet	Engineering
Part	No.					Scrap		1	Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is]]	Thermoforming Finishing			Rec/Stor	e/Packaging	Other
NCF	No.	•				Work Order Update	╛╽		Large Fab	Composite		Supplier	
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Root					iption of work order update or Non-conformance	4	nitial ief Eng		tion ription	Sign & Date	Verification	QC Inspector	
Cause	Date Step Qty c			Qty	or Non-comormance		iei ciig	Desci	прион	Date	Vernication	QC IIISPECTOI	
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Lan	ding	Gear				General				_	,	_	
	\perp	Bending			<u> </u>	Bend		Grain		1	Ovalized	_	Pressure/Forced
1	\perp	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa			Over/Under	·	Temperature/Cure
	L	Cracks			<u> </u>	Broken/Damaged	L	i '	on Incomplete		Part Incorred	-	Weld
1	\perp	Crushed/	Crimped		<u> </u>	Burrs		4	ions Incomplete/l	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
ŀ	\perp	Cuffs			ļ	Contamination	<u> </u>	Mainte			Part Moved		
1	\perp	Heat Trea				Countersink	_	Mislabe		<u> </u>	Positioned V		-1
	_	Inspection	-	Tube		Cut Too Short		Misread	1		Power Loss/	Surge	Other
	Ripples in Bend Drill Holes				┥	<u> </u>	Offset						
	Torque Waves in Extrusion Drawing				- ~	Out of Calibration							
	Turning Sequence Finish				⊣	Out of Sequence							
1	Wave/Twist in Tube Folio			Folio		Outside	Dimensions				· · · · · · · · · · · · · · · · · · ·		

DART AEROSPACE LTD	Work Order:	98655
Description: End Plate	Part Number:	D3067-1
Inspection Dwg: D3067 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Prototype

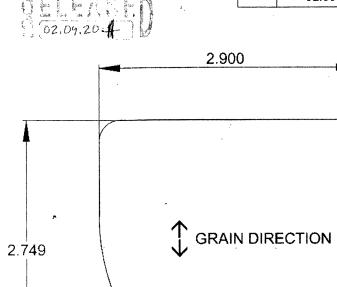
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.900	+/-0.010	7.885	V		V	MM-01
2.749	+/-0.010	2.885	V		V	
	!					
1 10 10						

Measured by:	Mn	Audited by:	SMS	Prototype Approval:	N/A
Date:	15.03 24	Date:	133.025	Date:	N/A

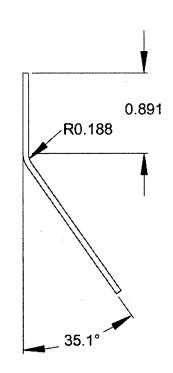
Rev	Date	Change	Revised by	Approved
Α	03.10.07	New Issue	KJ/RF	14



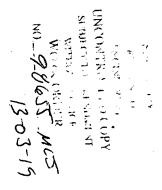
	_							
DESIGN	W	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA					
CHECK	界	APPROYED	D3067	REV, A SHEET 1 OF 1				
DATE	02.0	09.11	END PLATE	SCALE 1:1				
A	0	2.09.11	NEW ISSUE					



D3067-1 FLAT PATTERN



D3067-1 BEND DETAIL



D3067-1 END PLATE

- 1) MACHINE PER DWG FILE "D3067-1.SLDPRT"
 2) MATERIAL: 5052-H32 PER QQ-A-250/8 (REF DART SPEC. M5052H32S.063)
 OR 6061-T6 PER QQ-A-250/11 (REF DART SPEC. M6061T6S.063) ALUMINUM SHEET, 0.063 THICK
- 3) FINISH: NONE 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 5) ALL DIMENSIONS ARE IN INCHES

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